

State of the art

Fig. 1

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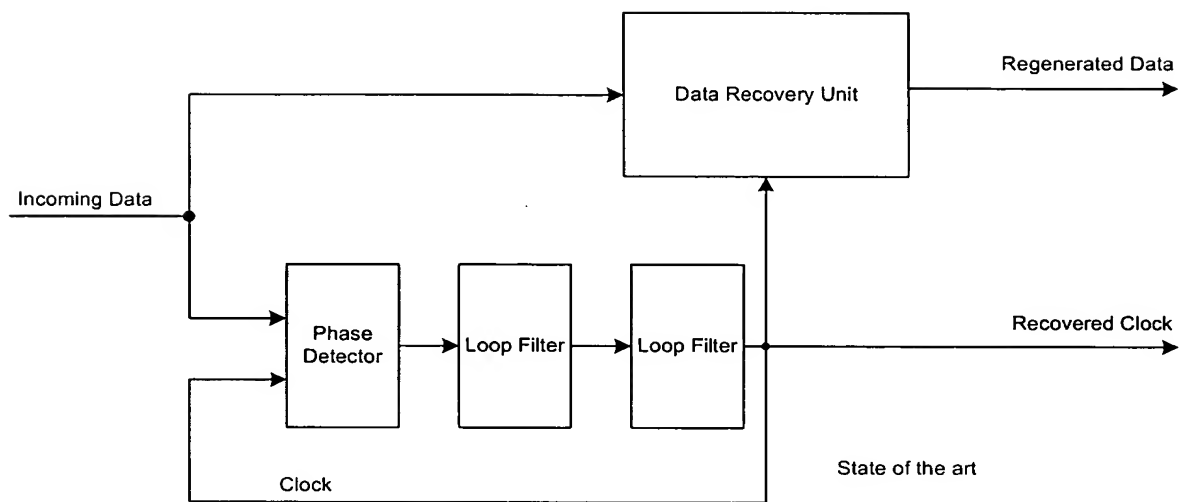


Fig. 2

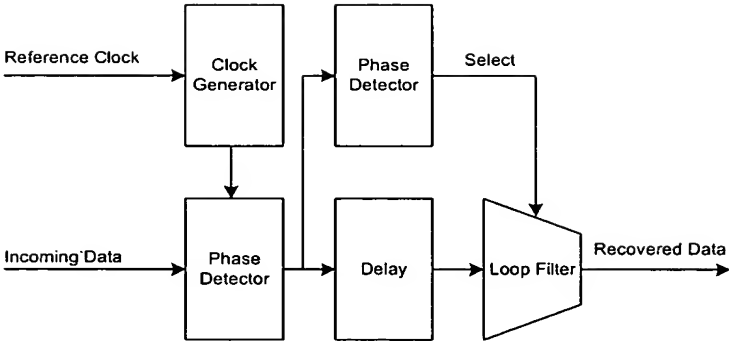


Fig. 3a

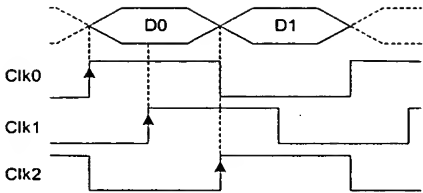


Fig. 3b

Fig. 3

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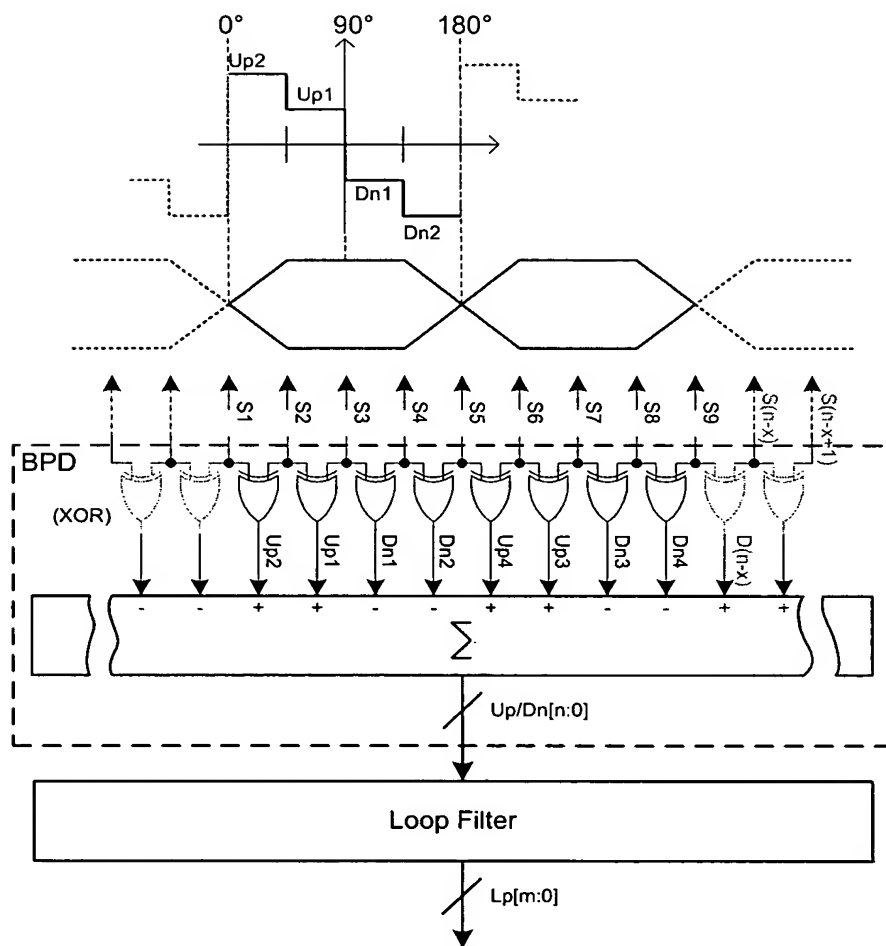


Fig. 4

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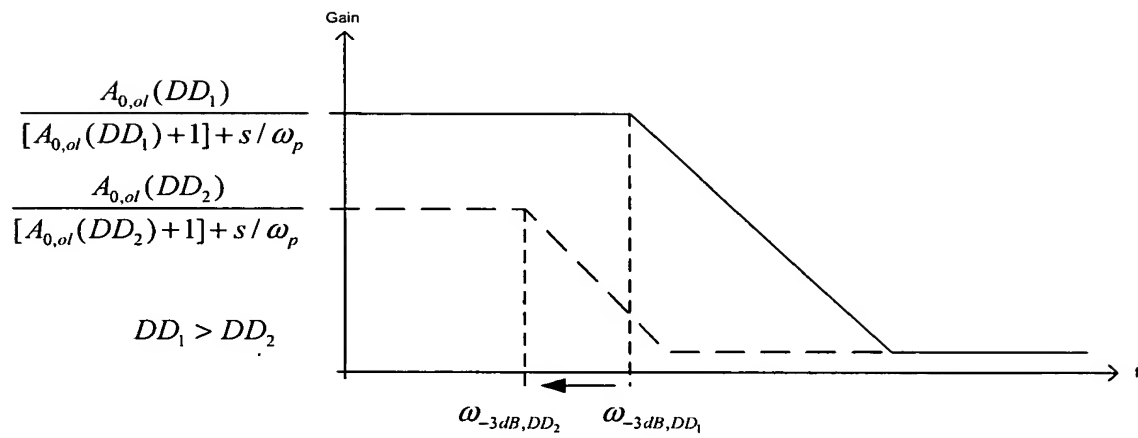


Fig. 5

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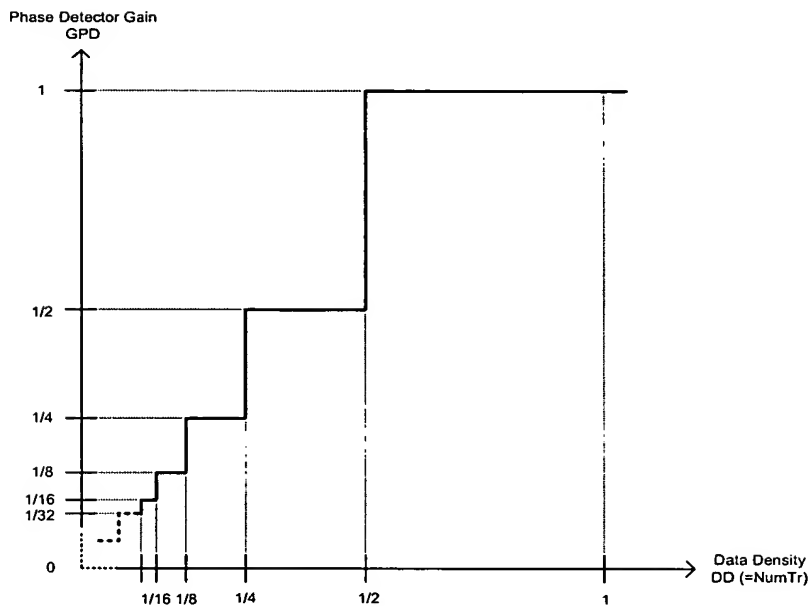


Fig. 6a

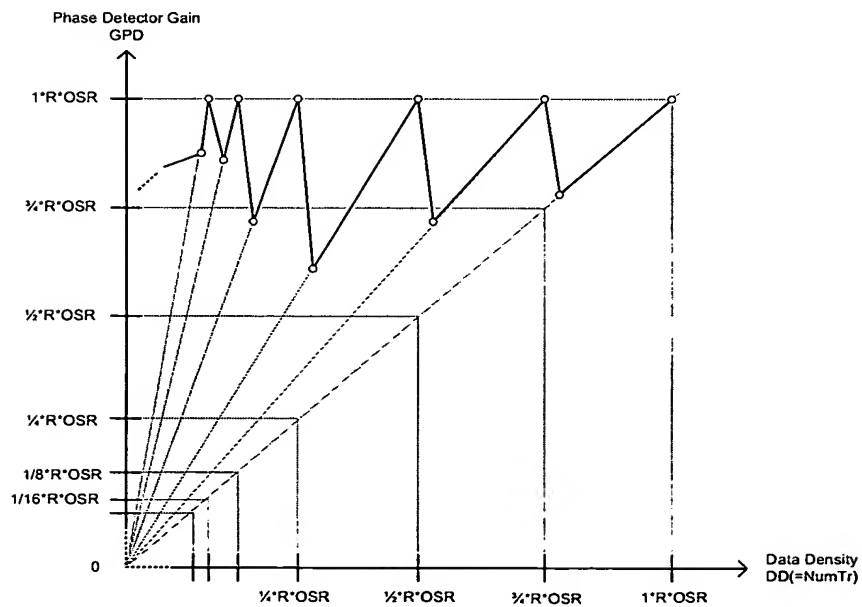


Fig. 6b

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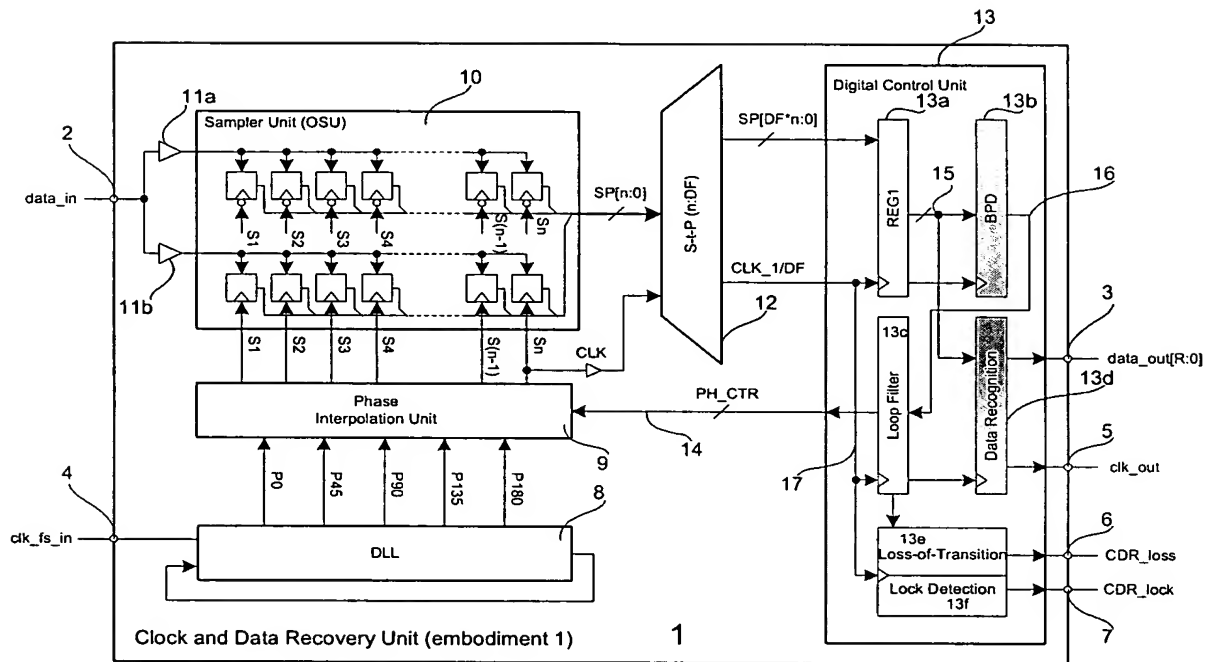


Fig. 7

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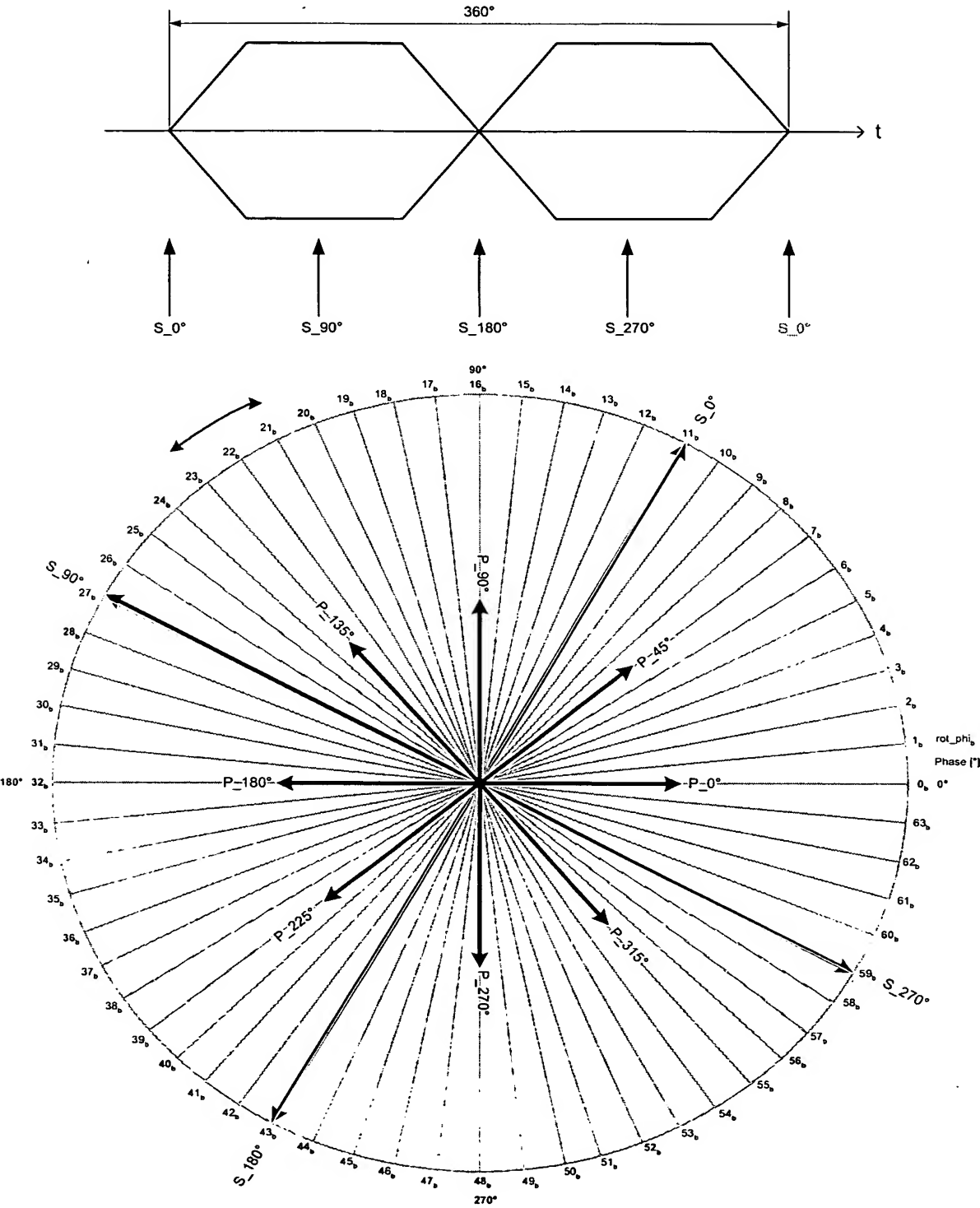


Fig. 8

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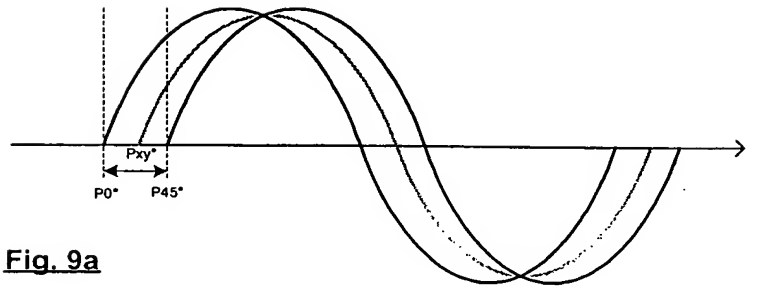


Fig. 9a

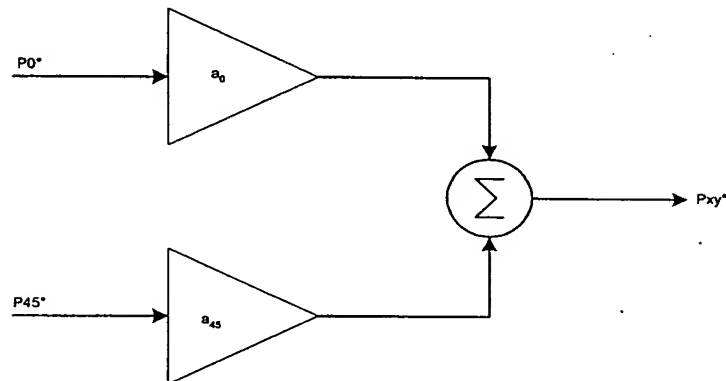


Fig. 9b

Fig. 9

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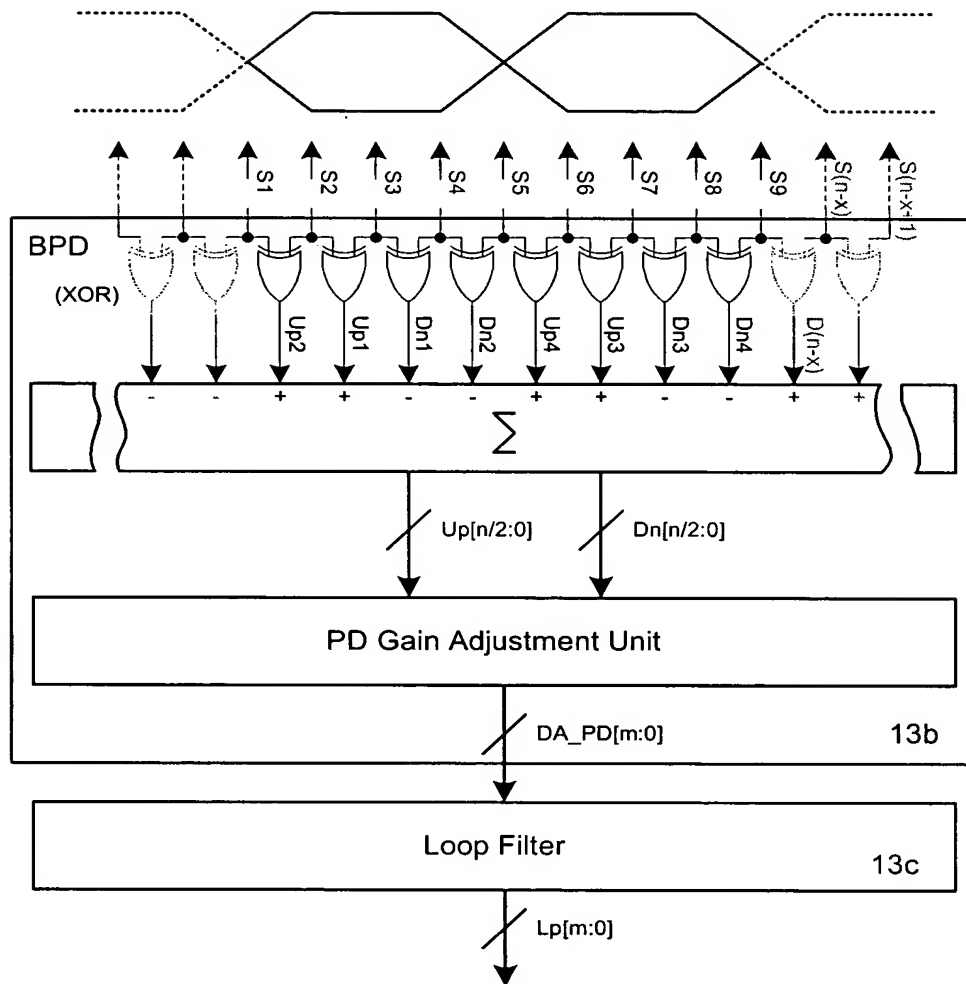


Fig. 10

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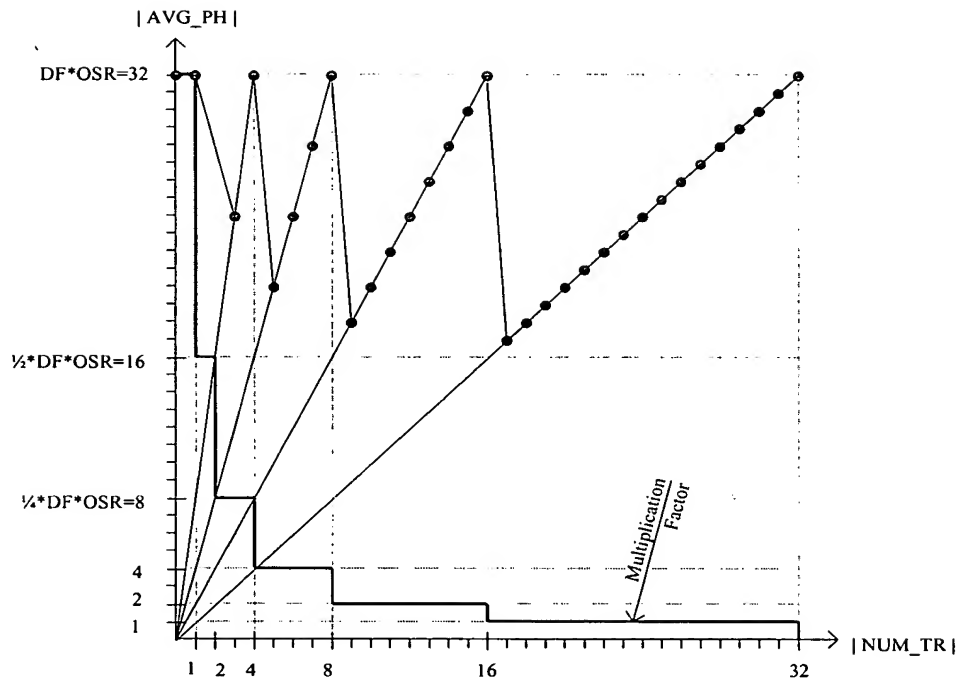


Fig. 11

Title: A CLOCK AND DATA RECOVERY
UNIT

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Atty Docket: 1406/146/2

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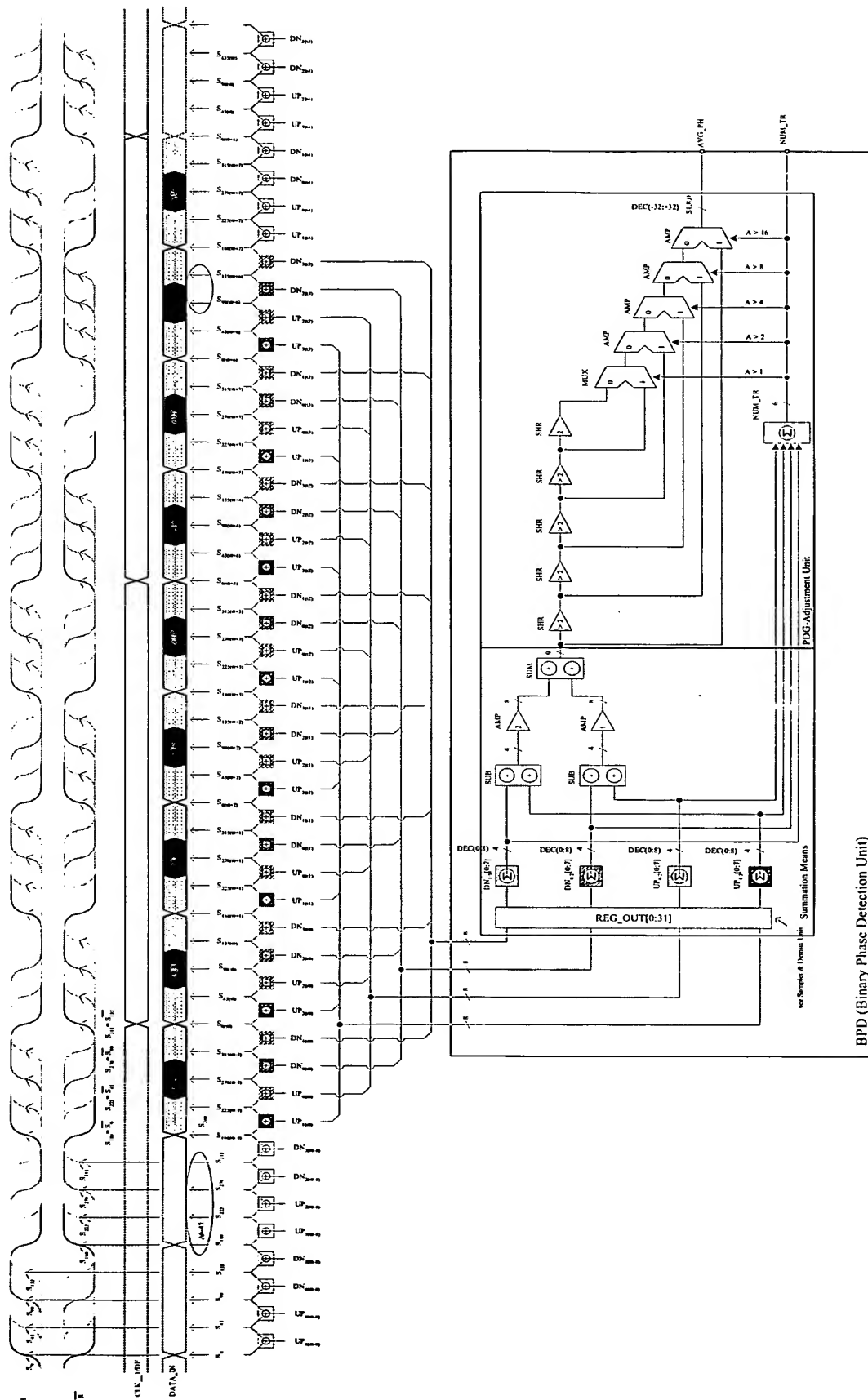


Fig. 12

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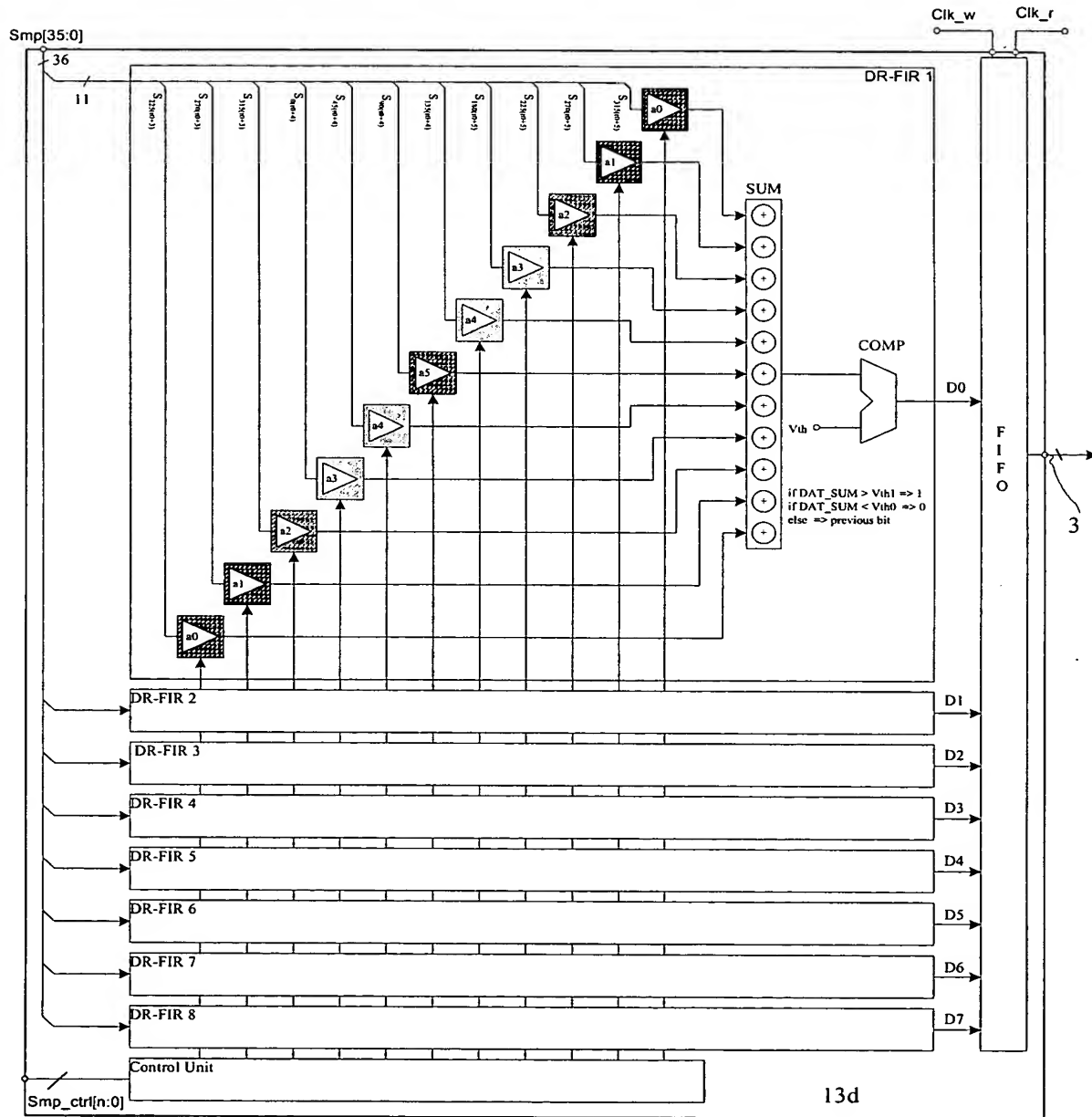


Fig. 13

Fig. 14

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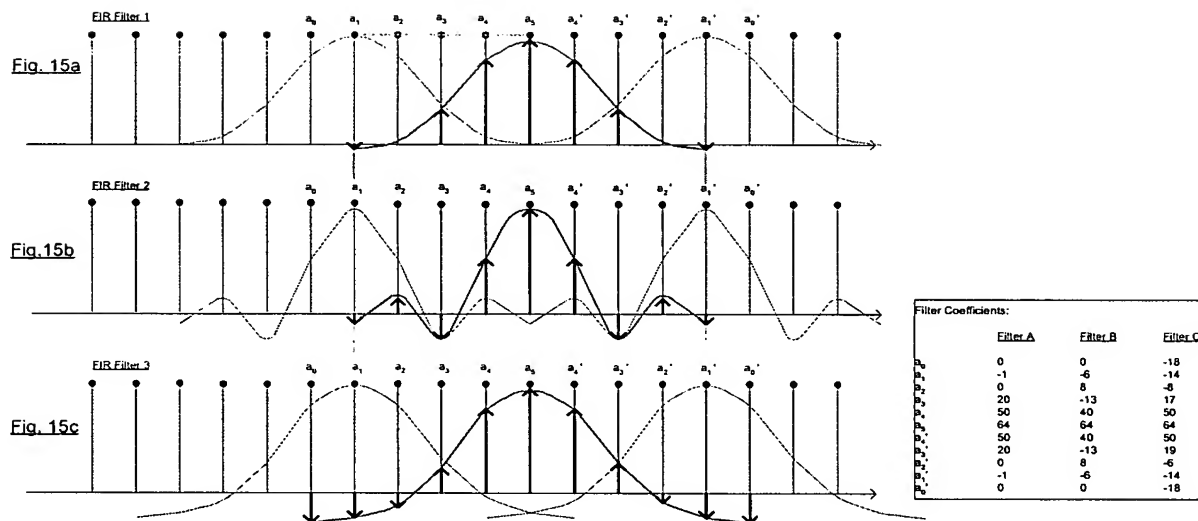


Fig. 15

$$H_{rm}(z) = a0 + a1 \cdot z^{-1} + a2 \cdot z^{-2} + a3 \cdot z^{-3} + a4 \cdot z^{-4} + a5 \cdot z^{-5} \dots\dots\dots$$

$$g(t) = K \cdot \frac{\sin \omega_s (t - t0)}{\pi(t - t0)}$$

$$P_s = \sum_{k=0}^{N-1} g(t = t_s + k) S_s$$

Transfer Function

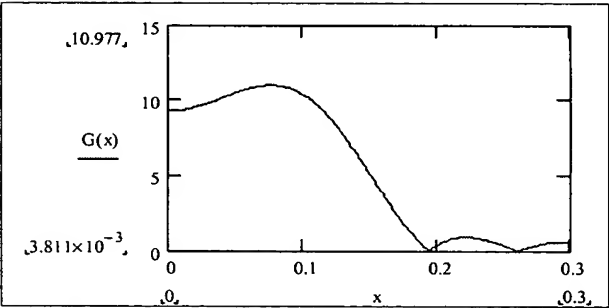


Fig. 16a

Impulse Response

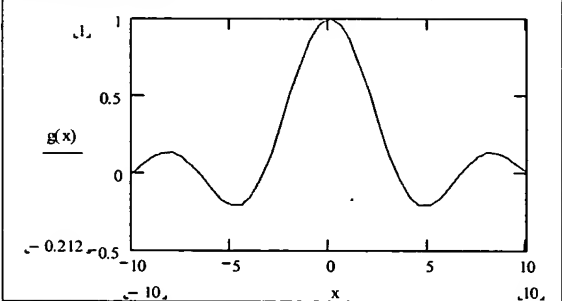


Fig. 16b

Fig. 16

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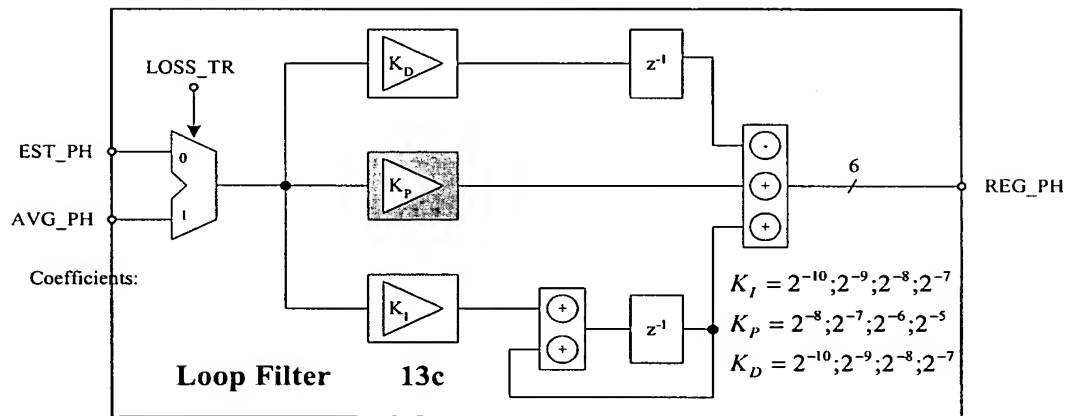


Fig. 17

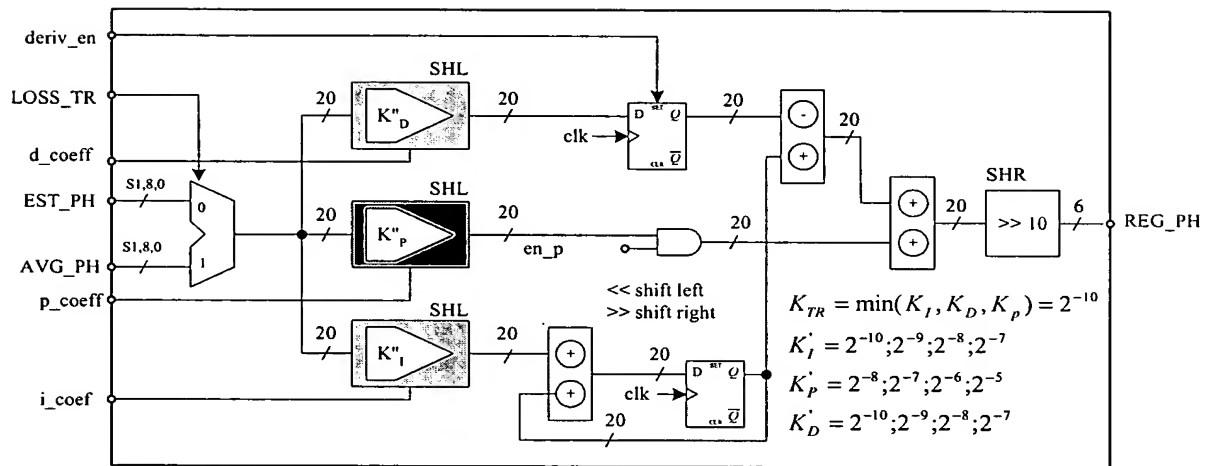


Fig. 18

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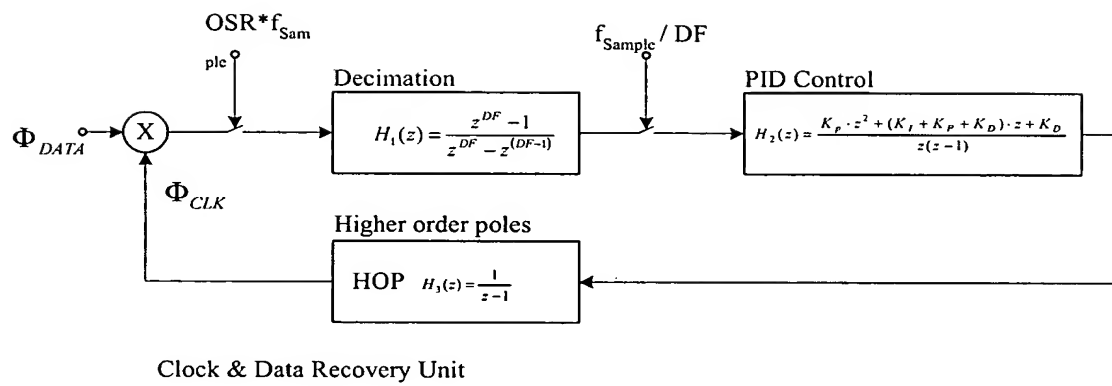
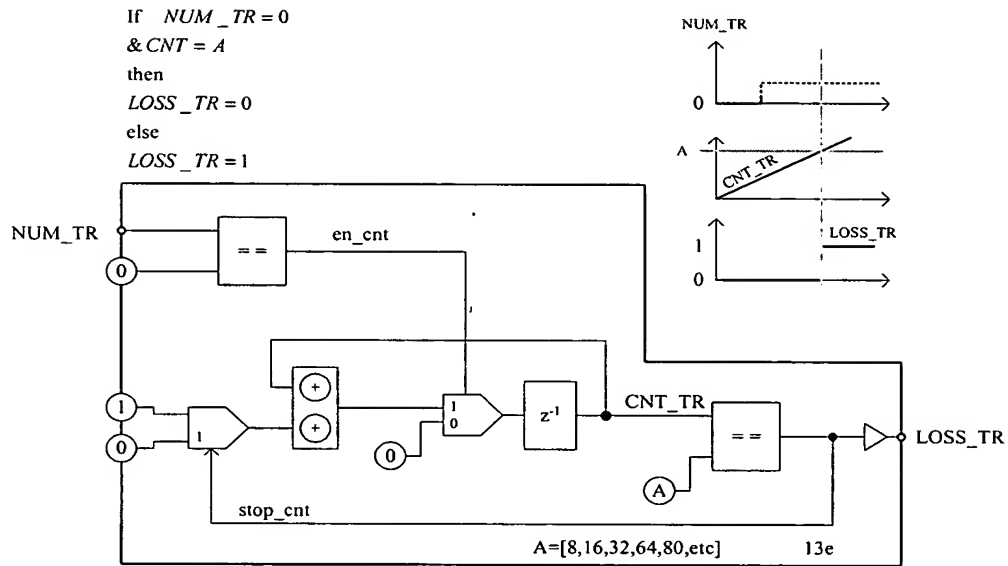


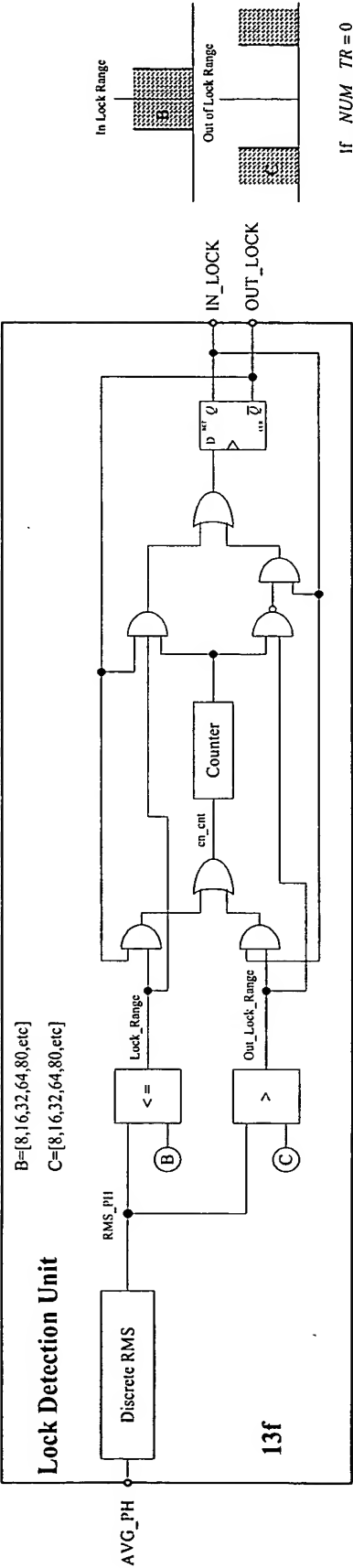
Fig. 19

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Transition Loss Detection Unit (TLDU)

Fig. 20



If NUM_TR = 0
& CNT = A
then
LOSS_TR = 0
else
LOSS_TR = 1

Fig. 21a

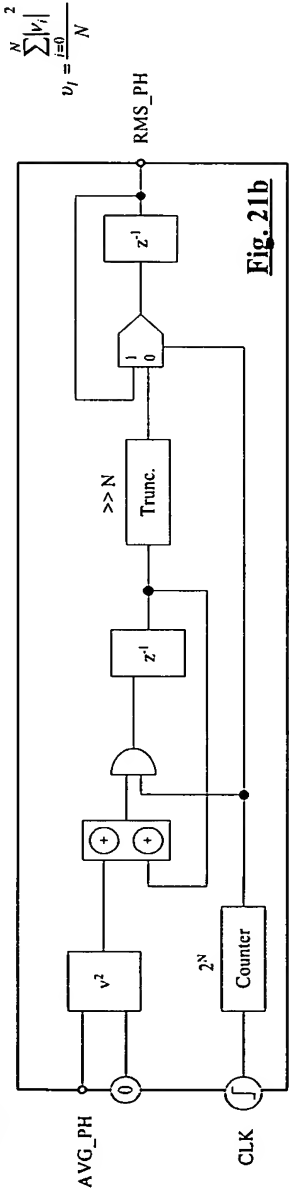


Fig. 21

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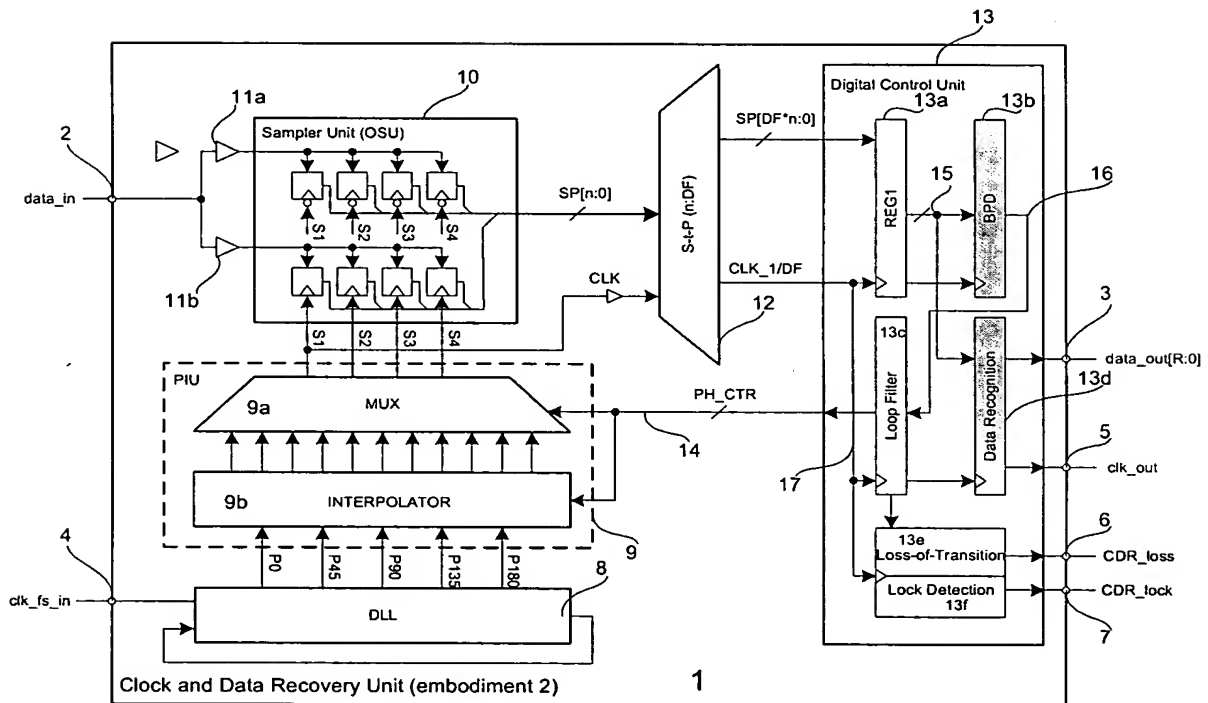


Fig. 22

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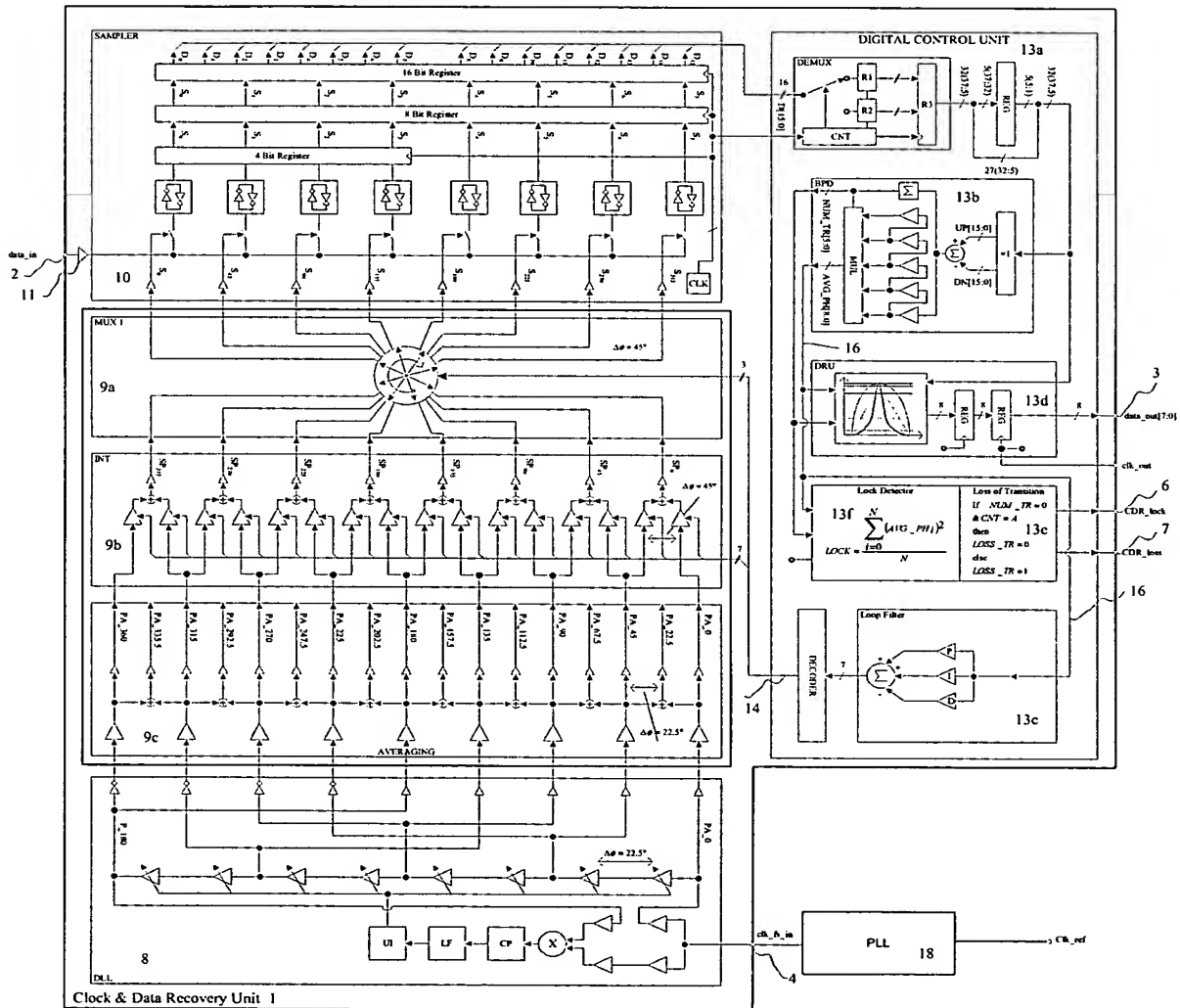


Fig. 23

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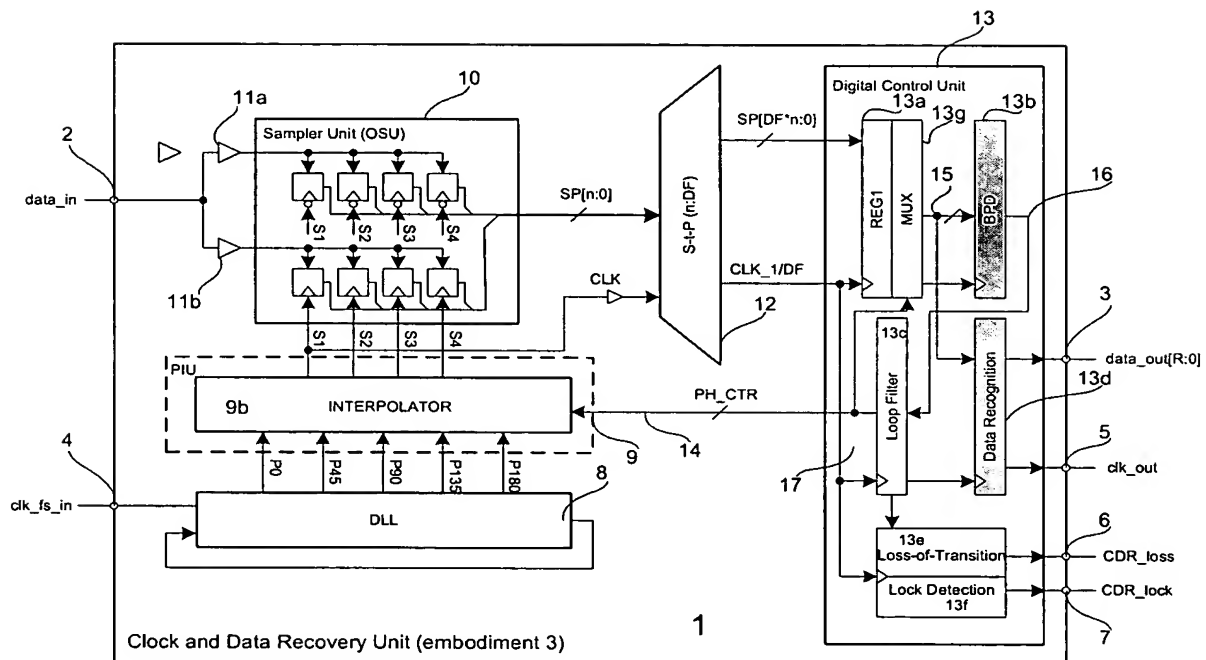


Fig. 24

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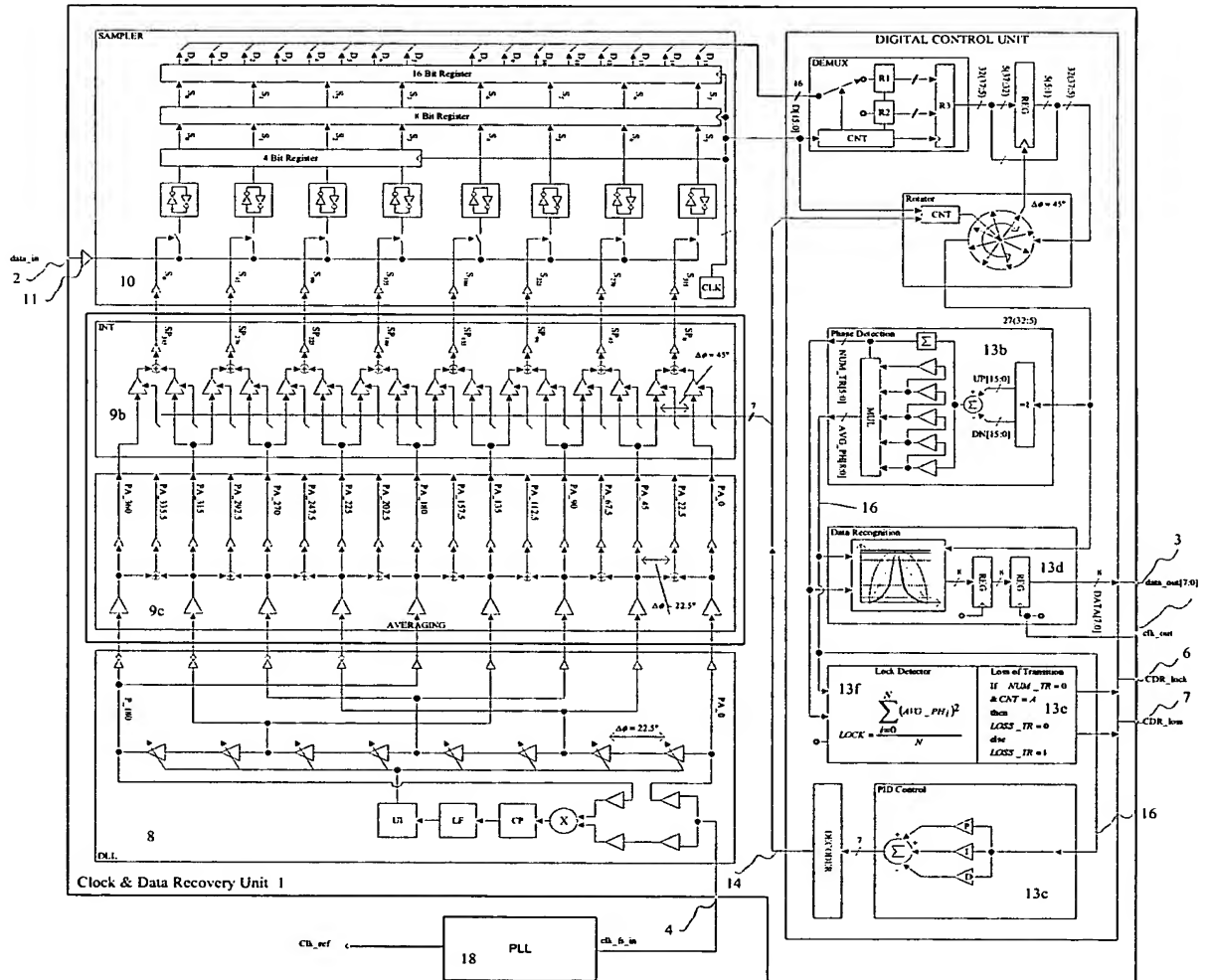


Fig. 25